Approved for use through 10/31/2002. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## UTILITY **PATENT APPLICATION TRANSMITTAL**

| Attorney Docket No. |   | 9-13528-204US  |  |  |
|---------------------|---|--|--|--|
| First I             | nventor                                   | Hong ZHANG   |  |  |
| Title               | METHOD AND APPARAT<br>A NETWORK WITH INTR | TUS FOR DERIVING ALLOWABLE PATHS THROUGH<br>ANSITIVITY CONSTRAINTS |  |  |
|                     |   | !  |  |  |

| Chily for new horiprovision  | nai applications under 37 CFR 1.53(b)  | /   -^        | press   | viaii Labei IVO.                                 |                                  |                  |                                    |               |
|--|--|---------------|---|--|----------------------------------|------------------|------------------------------------|---------------|
| APPLICATION ELEMENTS   |  |               | ADDRESS TO: Assistant Commissioner for Patents Box Patent Application |  |                                  |                  |                                    |               |
|  | cerning utility patent application conter                                      | nts.          |   | Wa   | shington,                        | DC 202           | 31                                 |               |
|  | orm (e.g., PTO/SB/17) duplicate for fee processing)                            |               | 7.  | CD-ROM or CD-R in<br>Computer Program            |                                  |                  | table or                           | 0             |
| _  | mall entity status.  |               |   | eotide and/or Amino A<br>oplicable, all necessar | cid Seque                        |                  | bmission                           | 17<br>17      |
| 3. Specification (preferred arrangement  | [Total Pages 25]   |               | a. [  | Computer Readab                                  | •                                | CRF)             |                                    | U.S           |
| - Descriptive title  | of the invention   |               | b. S  | —<br>pecification Sequence                       | Listing or                       | n:               |                                    | 69            |
| <ul> <li>Cross Reference to Related Applications</li> <li>Statement Regarding Fed sponsored R &amp; D</li> </ul> |  |               | i. CD-ROM or CD-R (2 copies); or                                      |  |                                  |                  |                                    |               |
| - Reference to sequence listing, a table,  |  |               |   | ii. D paper                                      |                                  |                  |                                    | 1             |
| or a computer p<br>- Background of   | orogram listing appendix<br>the Invention                                      |               | c.  | Statements verifyi                               | ng identity                      | of abo           | ve copies                          |               |
| - Brief Summary  | of the Invention   |               | ACCOMPANYING APPLICATION PARTS  |  |                                  |                  |                                    |               |
| - Brief Description - Detailed Description   | on of the Drawings (if filed) iption   |               | 9.  | Assignment Paper                                 |                                  |                  |                                    |               |
| - Claim(s)   |  |               |   | 37 CFR 3.73(b) St                                | •                                |                  | Power of                           |               |
| - Abstract of the  |  | 1             | <sup>10.</sup>  | (when there is an a                              | - '                              |                  | Attorney                           |               |
| 4. Drawing(s) (35 U  | I.S.C. 113) [Total Sheets 6  | ] ]           | 111.  | ☐ English Translation ☐ Information Disclo       |                                  | nt <i>(if ap</i> | o <i>plicable</i> )<br>  Copies of | IDS           |
| 5. Oath or Declaration   | [ Total Pages1   | ]             | 12.   | Statement (IDS)/P                                | TO-1449                          | لنا              | Citations                          |               |
|  | uted (original or copy) prior application (37 CFR 1.63 (d))                    |               | 13.   | Preliminary Amen                                 |                                  | DED 50           | 121                                |               |
| b (for continua  | tion/divisional with Box 18 completed)   | <b>.</b>      | 14.   | Return Receipt Po                                | cally itemi                      | zed)             | •                                  |               |
|  | ION OF INVENTOR(S) atement attached deleting inventor(s)                       |               | 15.   | Certified Copy of I (if foreign priority i       | Priority Do<br>s <i>claimed,</i> | cument           | t(s)                               |               |
| named in   | the prior application, see 37 CFR  |               | 16.   | Nonpublication Re                                |                                  |                  |                                    | D/05          |
| 1.63(0)(2)   | and 1.33(b).   |               | -   | → (b)(2)(B)(i). Applicate or its equivalent.     | ant must a                       | attach ic        | om P10/S                           | B/33          |
| 6. Application Data  | Sheet. See 37 CFR 1.76   |               | 17.   | <b>7</b> 1                                       | letter, ba                       | ink dra          | aft.                               |               |
|  | CATION, check appropriate box, and   | supply th     | ne requis   | site information below                           | and in a p                       | relimina         | ary amend                          | ment,         |
| or in an Application Data She  | _  | OLD)          | _   |  |                                  |                  |                                    |               |
| Continuation  Prior application information:   | Divisional Continuation-in-part (  | JIP)          |   | prior application No.:                           | /                                |                  |                                    | -             |
|  | ExaminerIONAL APPS only: The entire disclosure                                 | of the pri    |   |  | th or deci                       | aration i        | is supplied                        | under         |
| Box 5b, is considered a part o   | f the disclosure of the accompanying co relied upon when a portion has been in | ntinuatio     | n or divis  | ional application and is                         | hereby in                        | corpora          |                                    |               |
|  | 19. CORRESPO   |               |   |  |                                  |                  |                                    |               |
| Customer Number or Bar C   | ode Label 02098  |               | label here  | or   | Correspon                        | dence add        | tress below                        |               |
| Name   | Ogilvy Renault   |               | <u> </u>  |  |                                  |                  |                                    |               |
|  | Suite 1600   |               |   |  |                                  |                  |                                    |               |
| Address  | 1981 McGill College Avenue   |               |   |  |                                  |                  |                                    |               |
| City   | Montreal   | Sta           | ate (   | Quebec   | Zip C                            | ode              |                                    |               |
| Country  | CANADA   | Telepho       |   | 313-780-8661                                     | Fa                               |                  | 613-230-                           | 6706          |
|  | Max R. Wood  |               |   |  | // Agant)                        |                  |                                    | $\overline{}$ |
| Name (Print/Type)  | IVIAX IX. VVUUU  | $\rightarrow$ | regis   | tration No. (Attorne                             | <u> </u>                         |                  | 40,388                             |               |
| Signature  | July lem   |               |   |  | Date                             | Octo             | ber 23, 2                          | :UU3 <b>)</b> |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.



PTO/SB/17 (10-03)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number Complete if Known FEE TRANSMITTAL Application Number Filing Date for FY 2004 Hong ZHANG First Named Inventor Effective 10/01/2003. Patent fees are subject to annual revision. **Examiner Name** Applicant claims small entity status. See 37 CFR 1.27 Art Unit **TOTAL AMOUNT OF PAYMENT** (\$) 846 9-13528-204US Attorney Docket No METHOD OF PAYMENT (check all that apply) FEE CALCULATION (continued) Money Order None 3. ADDITIONAL FEES Large Entity | Small Entity Deposit Account: Fee Fee Fee Description Deposit Code Code (\$) (\$) Fee Paid 19-5113 Account 1051 2051 130 65 Surcharge - late filing fee or oath Number Deposit 1052 50 2052 Surcharge - late provisional filing fee or **OGILVY RENAULT** Account cover sheet 1053 130 1053 Non-English specification 130 The Director is authorized to: (check all that apply) 1812 2,520 For filing a request for ex parte reexamination 1812 2.520 Charge fee(s) indicated below Credit any overpayments Requesting publication of SIR prior to 1804 920 1804 Charge any additional fee(s) or any underpayment of fee(s) Examiner action Charge fee(s) indicated below, except for the filing fee Requesting publication of SIR after Examiner action 1805 1,840 1805 1.840\* to the above-identified deposit account. 1251 110 2251 Extension for reply within first month **FEE CALCULATION** Extension for reply within second month 1252 420 2252 210 1. BASIC FILING FEE 1253 950 2253 Extension for reply within third month arge Entity Small Entity Fee Paid <u>Fee Fee</u> Code (\$) Fee Description Code (\$) 1254 1,480 2254 740 Extension for reply within fourth month 1,005 Extension for reply within fifth month 1255 2.010 2255 1001 770 2001 385 Utility filing fee 770 1401 330 2401 1002 340 2002 170 Design filing fee 165 Notice of Appeal 1003 530 1402 330 2402 165 Filing a brief in support of an appeal 2003 265 Plant filing fee 2004 1403 290 2403 145 Request for oral hearing 1004 770 385 Reissue filing fee 1451 1.510 1451 1,510 Petition to institute a public use proceeding 1005 160 2005 R۸ Provisional filing fee 1452 110 2452 55 Petition to revive - unavoidable SUBTOTAL (1) (\$) 770 1453 1.330 2453 665 Petition to revive - unintentional 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE 1501 1.330 2501 665 Utility issue fee (or reissue) Fee from Extra Claims Fee Paid 1502 480 2502 below 240 Design issue fee | x [18 Total Claims 36 1503 640 2503 320 Plant issue fee Independent -0 - 3\*\* = X 1460 130 1460 130 Petitions to the Commissioner Multiple Dependent 1807 50 1807 50 Processing fee under 37 CFR 1.17(q) Large Entity Small Entity 1806 180 1806 180 Submission of Information Disclosure Stmt **Fee Description** 40 Recording each patent assignment per Code (\$) Code (\$) 40 8021 40 8021 property (times number of properties) 1202 18 2202 9 Claims in excess of 20 385 Filing a submission after final rejection (37 CFR 1.129(a)) 1809 770 2809

| **or number previ | iously paid, if greater; For Reissues, see above | *Reduced by Basic Filin              | ng Fee Paid | SUBTOTAL  | (3) (\$) 40      |  |
|-------------------|--|--------------------------------------|-------------|-----------|------------------|--|
| SUBMITTED BY      |  |                                      |             | (Complete | (if applicable)) |  |
| Name (Print/Type) | Max R. Wood                                      | Registration No.<br>(Attorney/Agent) | 40,388      | Telephone | 613-780-8681     |  |
| Signature         | They lom   |                                      |             | Date      | October 23, 2003 |  |

1810

1801

1802

770

900

Other fee (specify)

2810

1802

385 For each additional invention to be

examined (37 CFR 1.129(b))

of a design application

Request for Continued Examination (RCE)

Request for expedited examination

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Independent claims in excess of 3

\*\* Reissue independent claims

\*\* Reissue claims in excess of 20

l/¢\ 36

over original patent

and over original patent

Multiple dependent claim, if not paid

1201

1203 290

1204

1205

86

86

18

2201

2203

2204

2205

43

145

43

9

SUBTOTAL (2)



October 23, 2003

## **Mail Stop Patent Application**

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
U.S.A.

Sir:

Re:

**New United States Patent Application** 

Title: METHOD AND APPARATUS FOR DERIVING ALLOWABLE PATHS

THROUGH A NETWORK WITH INTRANSITIVITY CONSTRAINTS

Inventor(s):
Assignee:

Hong ZHANG et al.
Nortel Networks Limited

Our File:

9-13528-204US MRW

Transmitted herewith for filing is the patent application of:

**INVENTORS:** 

Hong ZHANG

Peter ASHWOOD SMITH

Guo Qiang WANG

## TITLE OF THE INVENTION:

METHOD AND APPARATUS FOR DERIVING ALLOWABLE PATHS THROUGH A NETWORK WITH INTRANSITIVITY CONSTRAINTS

The following documents are enclosed:

- a) Utility Patent Application Transmittal PTO/SB/05
- b) Bank draft No. 17268575-111, Fee Transmittal Form PTO/SB/17 (in duplicate) and Patent Application Fee Determination Record PTO/SB/06, covering:



Commissioner for Patents Page 2

| Filing Fee                           | \$770.00        |
|--------------------------------------|-----------------|
| Recording of Assignment              | \$ 40.00        |
| Total Number of Claims: 22           |                 |
| Claims in excess of 20 (2 @ \$18.00) | \$ <u>36.00</u> |
| Total                                | \$846.00        |

- c) Specification/Claims/Abstract
- d) Formal Drawings (6 Sheets Figs. 1 8)
- e) Declaration under 37 CFR 1.63, with Patent Application Data Sheet
- f) Power of Attorney
- g) Assignment in favor of Nortel Networks Limited with Recordation Form PTO-1595
- h) Information Disclosure Statement with PTO Form 1449
- i) Return receipt postcard.

The applicant/inventor(s) qualify for large entity status.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to our Account No. 19-5113.

Please note that the address of the agents for the applicant in this matter should be the Montreal address identified in the enclosed Power of Attorney. Correspondence may be directed to Max R. Wood at the Montreal address of Ogilvy Renault.

Respectfully submitted,

Max R. Wood

Reg. No. 40,388, Agent of Record

MRW:kp/Encls.